

NOTE ON THE VARIETIES OF *EPIPHRAGMOPHORA MORMONUM*.

BY H. A. PILSBRY.

In treating of this species both Binney and Stearns have commented on its variability. In examining the series in our collection it appears to me that three well-marked races or subspecies exist, which may be readily distinguished.

Typical *mormonum* is large and depressed, pale reddish corneous, often fading to a paler tint on the base; the brown girdle is conspicuously darker, and broadly bordered with white above and below. Surface glossy, sculptured with growth-wrinkles only, or if spiral striæ are present they are very faint; apex minutely granulose. Diam. 29-31, alt. 14-15 mm., sometimes smaller. Whorls 6.

Mormon Island, in the American River. Sacramento Co., Cal. (type locality); Tuolumne Co. (Hemphill).

Binney's figures represent Pfeiffer's type.

Var. *cala*, n. v. Smaller and less depressed; dark reddish brown, the peripheral girdle not conspicuously darker, yellow-bordered; surface sculptured with dense minute spiral striæ; whorls  $5\frac{1}{2}$ ; diam. 22, alt. 14 mm., or diam. 26, alt. 15 mm. Types from Big Trees, Calaveras co., Cal.; Fred. L. Button, H. Hemphill.

Much commoner in collections than the pale, glossy typical form.

Var. *buttoni*, n. v. Color as in var. *cala*, but shell more depressed, periphery more or less carinated in front, the surface studded with minute prominences which bear rather long golden-brown hairs when unrubbed; granulation of the apex more strongly developed. Whorls  $5\frac{1}{2}$ . Diam. 22-24, alt.  $11\frac{1}{2}$ -12 mm.

Nassau Valley, Calaveras Co., Button. Redding, Shasta Co.; McGregor. Probably some larger shells collected by Hemphill at Cave City, Tuolumne Co., belong to this variety, but the specimens before me are in poor condition. The largest measures 29 mm. diam.

This variety forms a transition to *E. lillebrandi*, which is only another term in the variation series, as Stearns has already remarked.

A NEW *CALLIOSTOMA* FROM FLORIDA.

BY HENRY A. PILSBRY.

*Calliostoma Vellei* n. sp.

Shell imperforate, high-conic, moderately solid, white, with a series of small, reddish maculae at the periphery of each whorl. Whorls

nearly 7, the first one smooth and rounded, the rest lightly concave above and sculptured with four equal beaded spirals (and some interstitial threads on the last whorl or two), with a much broader, more prominent spiral rib at the periphery and projecting above each suture, where a narrower spiral shows below it; the last whorl quite convex just below the prominent rib, the base moderately convex, and sculptured with 14 beaded spirals, contiguous toward the periphery, but more separated and with interstitial threads in the intervals on the rest of the base, which is further sculptured by fine, curved, radial grooves. Three or four of the spirals are rather sparsely dotted with red. Aperture trapezoidal, white and pearly within; columella pearly, white and concave above, ending below in a slight tooth. Alt.  $10\frac{1}{2}$ , diam.  $9\frac{3}{4}$  mm.

Caxambas Pass, S.-W. Florida, collected in 1898 by Dr. J. W. Velie, in whose honor it is named.

#### GENERAL NOTES.

ONLY A ONE-TENTH OYSTER CROP.—This has been the poorest year in ten in the oyster industry of Maryland. In years past from 5,000,000 to 10,000,000 bushels of oysters have been taken from the bay. This year the yield will be about 1,000,000 bushels.

The question of legislation for the protection of the oysters has agitated the state for years, but in the meantime the bivalve is disappearing. Notwithstanding the diminishing supply, however, there have been sufficient oysters to keep going all the packing houses in Baltimore, which employ about 5000 people. Nearly 500 dredging boats are sailing out of Baltimore.—*Phila. Record, Dec. 30.*

BIVALVE SHELLS USED IN MANILA FOR WINDOW PANES.—In Manila, where there is an interesting field open to the naturalist, the natives have an odd substitute for glass. It is a bivalve shell of about nine inches of surface, so transparent that print can be readily seen through it, and admitting a mellow light in a room where it is used as window glass. The shell is an attractive object, flat, and in appearance resembles isinglass. One could almost imagine that it was some skillful invention of the natives, could not the growth rings be readily observed. The outer side of the shell is perceptibly rough, while the interior is perfectly glazed over and in the light has the pearly lustre found in many of the thin-shelled, oyster-like mollusks